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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,324	09/02/2003	Patrick W. Breslin	6570-A-01	2973

7590 01/26/2005

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EXAMINER	
SAETHER, FLEMMING	

ART UNIT	PAPER NUMBER
3677	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/653,324	BRESLIN ET AL.	
	Examiner	Art Unit	
	Flemming Saether	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-12,14-16,18,19 and 22-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *22 and 24* is/are allowed.

6)☒ Claim(s) *1,3-12,14-16,18,19,23,25 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The supplemental reply filed on 05 January 2005 was not entered because supplemental replies are not entered as a matter of right except as provided in 37 CFR 1.111(a)(2)(ii). The supplemental reply is not limited to placement of the application into condition for allowance since the claims were not amended in accordance with the proposed examiner's amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-8, 12, 14-16, 18, 19, 23, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Weller (US 3,618135). In the embodiment of Fig. 5, Weller discloses a self-locking bolt assembly and method comprising a bolt having a head (34), a threaded shank (12') and a through bore with a tapered end and a threaded end (not labeled, see Fig. 5). The bore is read to have a midsection, which is also threaded, between the threaded end and the tapered bore (it should be noted that the claims do not preclude the midsection from being threaded). A screw set pin is received in the through bore and includes threads for engagement with the threads of the bore and a tapered end (33) for engagement with the tapered end of the bore. As seen in Fig. 5, the taper angle of the tapered end section of the screw set pin is less than that of the tapered end section of the bore so that a narrowed end portion of the

pin's tapered end section engages a narrowed end portion of the bore's tapered end section. Also as seen in Fig. 5, a shaft of the screw set (again which is threaded) in sufficiently long to allow engagement of the tapered portions to expand the bolt prior to any galling of the threads. The bolt includes plural slits (15) including pairs of opposed slits forming four segments (16, 17). The screw set includes a key opening (20') for applying torque. The shaft of the screw set inherently as defined by the tapered end section would have a diameter smaller than the threads for the device to be operative. There is further provided an body (10) receiving the bolt wherein in use the screw set is axially displaced by rotating the set screw causing the tapered end of the bolt to expand so that the fingers defined by the slits elastically deform to dig into the internally threaded body thereby forming a thread lock. With the application of adequate force to deform the fingers, they would capable a differential radius means to deform and dig into the bore in the body as well as the tapered end section of the set screw since the fingers form an edge which forms a contact area with the tapered end section.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weller. In the embodiment of Fig. 5, Weller does not disclose the threads on the

shank of the bolt being expanded. However, in the embodiment of Figs. 6 and 7 Weller teaches that the shank of the bolt (12" in Fig 6) could be configured to have threads extending to the distal end of the shank such that upon expansion of the slits, the threads on the bolt would expand and, at least to some extent, dig into threaded bore of the body. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to make the bolt shank in the embodiment of Fig. 5 threaded to the distal end as shown in the embodiments of Figs. 6 or 7 such that it could be used in a uniformly threaded body and simplifying machining operations.

Allowable Subject Matter

Claim 22 and 24 are allowable because the prior art does not disclose the method wherein, in combination with the other claimed features, the screw set pin is sufficiently into the bolt to where edge contact of the fingers dig into the tapered end section of the pin to securely lock the screw set pin to the bolt.

Response to Remarks

Applicant's arguments involving Liljeberg are moot in view of the new grounds of rejection.

In regards to Weller, applicants argue the bolt of Weller is directed to an electrical component and would not be suitable in high tensile force applications. In response, the applicant may be correct in that Weller is not suitable in high tensile force

application. However, the claims are limited to a bolt and method which include no mention of any high tensile force applications. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Along the same lines, the applicant in reminded that the claims must be given their broadest reasonable interpretation See *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Also, in the article claims, the digging done by the fingers is an merely an intended use and a recitation of the intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). It should be noted that the method claims including the digging done by the fingers has been indicated as allowable.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Flemming Saether
Primary Examiner
Art Unit 3677